25

## What is claimed is:

A compound 8 to 50 nucleobases in length targeted
to a nucleic acid molecule encoding microsomal triglyceride transfer protein, wherein said compound specifically
hybridizes with and inhibits the expression of a nucleic aid molecule encoding microsomal triglyceride transfer protein.

-92-

- 10 2. The compound of claim 1 which is an antisense oligonucleotide.
- 3. The compound of claim 2 wherein the antisense oligonucleotide has a sequence comprising SEQ ID NO: 17, 18, 19, 20, 22, 23, 32, 33, 47, 48, 49, 50, 51, 52, 53, 54, 57, 58, 59, 70, 71, 72, 73, 74, 77, 78, 79, 81, 82, 85, 88, 89, 91, 92, 93, 94, 95, 96, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 20 135, 136, 137.
  - 4. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.
  - 5. The compound of claim 4 wherein the modified internucleoside linkage is a phosphorothioate linkage.
- 5. The compound of claim 2 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.
  - 7. The compound of claim 6 wherein the modified sugar moiety is a 2'-O-methoxyethyl sugar moiety.
- or The compound of claim 2 wherein the antisense

- 9. The compound of claim 8 wherein the modified nucleobase is a 5-methylcytosine.
- 10. The compound of claim 2 wherein the antisense oligonucleotide is a chimeric oligonucleotide.
- 11. A compound 8 to 50 nucleobases in length which specifically hybridizes with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding microsomal triglyceride transfer protein.
  - 12. A composition comprising the compound of claim 1 and a pharmaceutically acceptable carrier or diluent.
- 13. The composition of claim 12 further comprising a colloidal dispersion system.

20

- 14. The composition of claim 12 wherein the compound is an antisense oligonucleotide.
- 15. A method of inhibiting the expression of microsomal triglyceride transfer protein in cells or tissues comprising contacting said cells or tissues with the compound of claim 1 so that expression of microsomal triglyceride transfer protein is inhibited.
- 16. A method of treating an animal having a disease or condition associated with microsomal triglyceride transfer protein comprising administering to said animal a therapeutically or prophylactically effective amount of the compound of claim 1 so that expression of microsomal triglyceride transfer protein is inhibited.
- 17. The method of claim 16 wherein the condition involves abnormal lipid metabolism.

- 18. The method of claim 16 wherein the condition involves abnormal cholesterol metabolism.
- 19. The method of claim 16 wherein the condition is 5 atherosclerosis.
  - 20. The method of claim 16 wherein the disease is cardiovascular disease.